[All dates in January except as otherwise specified]

River and station	Flood stage	Above flood stages—dates		Crest	
		From-	То	Stage	Date
MISSISSIPPI DRAINAGE—continued					
Illinois:	Feet			Feet	
Morris, Ill.	13	23	24	13.6	23
Peru, Ill	14	(2)	(1)	19. 5	24, 25
Henry, Ill	10	23	(1)	12. 7	28
Peoria, III	18	25	(1)	19.6	30
Havana, Ill	14	(3)	`` 2	14.7	Dec. 26
_		6	(1)	16.8	31
Beardstown, Ill	14	(3)	∵ 2	14.8	12/27, 28
		23	(1)	17. 5	29-31
Pearl, Ill	12	25	(1)	13. 3	30, 31
St. Francis: St. Francis, Ark	17	20	(1)	24.5	30
Arkansas: Yancopin, Ark	29	28	(1)	30. 5	31
Petit Jean: Danville, Ark	20	7	27	20. 1 23. 3	7 26
White:		25	2,	23. 3	20
Calico Rock, Ark	18	25	26	26.7	25
Batesville, Ark	23	25	28	31.7	25
Newport, Ark	26	26		29.0	29
Georgetown, Ark		29	(1) (1)	24. 4	31
Black:		- 1	`,		"
Williamsville, Mo	11	26	26	12.3	26
Poplar Bluff, Mo	14	25	28	16. 5	27
Corning, Ark	īī	19	(1)	14. 1	31
Black Rock, Ark	14	25	ζij	24.6	26
Cache: Patterson, Ark	9	27 }	(1) (1)	9.6	31
Sulphur:	_	'	``		
Ringo Crossing, Tex	20	6	9	26. 5	7
		• 25	29	28. 4	28
Finley, Tex	24	9	15	26. 2	18
		28	(1)	26. 7	29
Ouachita:		[ [			
Arkadelphia, Ark	12	26	27	14. 1	26
Camden, Ark	30	29	(1)	31. 7	30
WEST GULF DRAINAGE		! I			Ι.
Trinity:		( l			· .
Dallas, Tex	25	25	25	27, 1	25
Trinidad Tay	28	28	(1)	29. 8	30
Trinidad, TexGuadalupe: Victoria, Tex	16	5	6	25. 9	5
duadatupo, victoria, 101	10	: [	•	-0.0	, ,

<sup>1</sup> Continued at end of month.

## MEAN LAKE LEVELS

Note.—The printing of the table Mean Lake Levels, appearing since 1914 in this space, is suspended until further notice. Readers of the Review who use the data, if there be such, are asked to communicate with the editor giving their reasons for its continuance.—Editor.

## EFFECT OF WEATHER ON CROPS AND FARMING OPERA-TIONS, JANUARY, 1929

By J. B. KINCER

General summary.—During the first decade the passage of a storm across the country seriously interfered with outdoor operations and was rather hard on livestock in some western sections. A generous snow cover was deposited by this storm in several interior districts and furnished ample protection against the cold which followed. Rains relieved the droughty conditions in most Southeastern States, though southern Florida remained dry. Moderate freezes occurred in the southern trucking sections of that State, but no serious damage was reported. Lower temperatures in the far Southwest were beneficial for citrus fruits and no damaging frosts occurred in south Pacific areas. Increased feeding of livestock was necessary in parts of the great western grazing area.

During the second decade the weather was again rather unfavorable for seasonal work on farms. Frequent rains in the South prevented plowing and other field operations, but there was still a deficiency of precipitation in southern Florida. The temperatures in this section were mostly favorable, although the mildness caused some apprehension as to the possible premature forcing of peach bloom, especially in Georgia. In the Northwest and most Rocky Mountain sections the period was cold, stormy, and rather hard on livestock, though the snow was beneficial for grain fields. Rain was needed in

the Southwest, especially in western Texas and New Mexico, but in other sections there were some helpful falls. Much of the interior of the country was bare of snow.

During the last decade much the coldest weather of the season prevailed in many sections from the central and northern Mississippi Valley westward, preventing seasonal outside operations and causing suffering among livestock. The January snowfall was unusually heavy in the western Lake region and extreme upper Mississippi Valley, with all previous records for the month broken in some places. The southeastern part of the country again experienced unusually mild weather for the season, with peach buds reported swelling in the Fort Valley district of Georgia and early varieties of fruit beginning to bloom in extreme southern Alabama, but the reaction to colder at the close of the month was beneficial in retarding premature development. Frequent rains in the South prevented much field work and very little preparation for spring planting could be made. Moisture was still needed in southern Florida and much of the Southwest.

Small grains.—During the first decade a light to generous snowfall preceded the cold weather over much of the winter wheat belt, which afforded a protection against the severe weather. In Nebraska the snow drifted badly and left some sections uncovered, while in Kansas the ground was bare in the northwestern part and wheat was frozen down. Conditions were also rather precarious in those parts of the Ohio Valley insufficiently covered and there was a lack of covering in the middle Atlantic area. In Montana and the Rocky Mountain districts most wheat fields had some protection and in the Pacific Northwest there was an ample covering when the coldest weather occurred; low temperatures retarded growth in the Southern States.

The weather was rather unfavorable for winter wheat during the second decade in many sections of the interior, though no extensive or widespread damage was reported. In the more eastern portions of the belt abnormally high temperatures caused a rapid disappearance of the snow cover and the ground was generally bare in much of the Ohio Valley; there was some ice in parts of Illinois and heavy rains caused local flooding in both Indiana and Ohio. From the northern portions of Illinois and Missouri northward wheat fields were generally well protected and also in the northern Great Plains, the Pacific Northwest, and most Rocky Mountain sections. In the main western belt the ground was bare with wheat frozen to the ground in western Kansas and some heaving in the southeast, but apparently without serious injury. In Oklahoma the crop was making slow growth, but in the Southern States winter grains made good progress under favorable conditions.

During the last decade the weather was mostly unfavorable for winter wheat, except in the more northern portions where there was a good snow cover. There was much ice in parts of Illinois and the northern third of Indiana, with a considerable cover in much of Missouri. In Kansas the ground continued bare in the western and southern portions, with the wheat frozen to the ground; most fields were still bare in Nebraska. Conditions were better in the far Northwest, and in the South the weather was largely favorable, but in the middle Atlantic area fields were mostly bare.

Miscellaneous crops.—There was some improvement in pastures in the Gulf section during the month, and an adequate protection for meadows prevailed in the more northern sections of the country. Considerable yard feeding was necessary in the northern Great Plains, with

<sup>&</sup>lt;sup>2</sup> Continued from last month.